

<b>Adventures in Aeronautics</b>			
<b>2007 Science</b>			
<b>Grade Expectations</b>			
<b>Vermont Science</b>			
<b>Grades 3-4</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Adventures in Aeronautics	VT	SCI.3-4.S3-4:3.1.d	Appropriate timing between observations (intervals) and/or number of trials needed.
Adventures in Aeronautics	VT	SCI.3-4.S3-4:9.1	Investigating and measuring how the total weight of the parts of a substance, no matter how they are combined, remains the same (e.g., water and gravel mixture, or a Lego car system, or the weight of sugar plus the weight of water equals the total weight of the sugar solution) and drawing conclusions from these data.
Adventures in Aeronautics	VT	SCI.3-4.S3-4:9.a	All matter has weight that can be measured.
Adventures in Aeronautics	VT	SCI.3-4.S3-4:9.b	The weight of the whole is the same as the sum of the parts.
Adventures in Aeronautics	VT	SCI.3-4.S3-4:21.1	Investigating and describing how different amounts of force can change the position or direction of motion of an object
Adventures in Aeronautics	VT	SCI.3-4.S3-4:21.b	The greater the force, the greater the change.
<b>Adventures in Aeronautics</b>			
<b>2007 Science</b>			
<b>Grade Expectations</b>			
<b>Vermont Science</b>			
<b>Grades 5-6</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Adventures in Aeronautics	VT	SCI.5-6.S5-6:19.1	Measuring and calculating speed (the distance an object moves over a measured amount of time).
Adventures in Aeronautics	VT	SCI.5-6.S5-6:19.b	Speed is a relationship between the distance an object travels and time elapsed.
Adventures in Aeronautics	VT	SCI.5-6.S5-6:21.1	Investigating variables that change an object's speed, direction, or both, and identifying and describing the forces that cause the change in motion.
Adventures in Aeronautics	VT	SCI.5-6.S5-6:21.a	A force applied to a moving object will change the object's speed, direction or both.
Adventures in Aeronautics	VT	SCI.5-6.S5-6:21.b	Friction is a force that often opposes motion.
Adventures in Aeronautics	VT	SCI.5-6.S5-6:22.a	Gravity is the force that holds objects to the earth's surface, keeps planets in orbit around the sun, and governs the rest of the motion in the solar system.
Adventures in Aeronautics	VT	SCI.5-6.S5-6:22.b	The force of gravity pulls toward the center of mass of an object.